PLEISTOCENE CAVE MATERIAL OF TASMANIAN NATIVE-HEN *TRIBONYX MORTIERII* AND SOOTY SHEARWATER *PUFFINUS GRISEUS* IN TASMANIA

by

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Breccias containing mainly mammalian but also traces of avian and reptilian material were found in Pleisto Scene Cave (MU-206) 144° 54'E, 40° 54'S, near Montagu, northwestern Tasmania (Murray and Goede·1977), and in Beginners Luck Cave (JF-79-80) 146° 28'E, 42° 34'E, in the Florentine Valley, Tasmania (Goede and Murray 1977).

In age the breccias are considered to be contemporaneous with or older than the last rise in sea level about 10,000 BP, which separated Tasmania from mainland Australia. Charcoal and human artefacts have been found in the breccia of Beginners Luck Cave but not in that of Pleisto Scene Cave.

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The non-ratite avian material at both caves includes complete and fragmented bones of the Tasmanian Native-hen *Tribonyx mortierii* (see Table 1). Measurements are as recommended in Scarlett (1972). They do not differ significantly from those given for recent material in Olson (1975) except for the proximal end of the tibiotarsus which he has measured differently and in unspecified manner. The Tasmanian Native-hen lives in open grassy areas near water (Ridpath 1972). Its range is now restricted to Tasmania. In Pliocene and Pleistocene times it occurred in southeastern Queensland (Olson 1975) and in recent prehistoric times at Kangaroo Island with other bird and mammal species now confined to Tasmania (Hope *et al.* in press).

At Beginners Luck Cave were found a left femur lacking the distal end and a left tarsometatarsus with damaged ends of a Sooty Shearwater *Puffinus griseus* (see Figure 1). The shaft of the femur has the bow and the shaft of the tarsometatarsus has the mediolaterial flattening that characterises those of Short-tailed Shearwater *P. tenuirostris* and the Sooty Shearwater. The bones are too large for *P. tenuirostris* and the right size for *P. griseus*. The Sooty Shearwater is an uncommon breeding seabird on small islands off the shores of Tasmania and southeastern Australia (Serventy *et al.* 1971). It breeds in huge numbers on small islands around Stewart Island, New Zealand, and on many sub-antarctic islands (Kinsky 1970, Watson 1975). It is possible that the Sooty Shearwater was blown inland by a gale and its remains either washed into the cave or carried there by a predator. It is more likely, however, that it was picked up on the coast and carried to the cave by man as an ornament or as food. At the time of deposition the seas may have been cooler and the Sooty Shearwater more common around Tasmania than now.

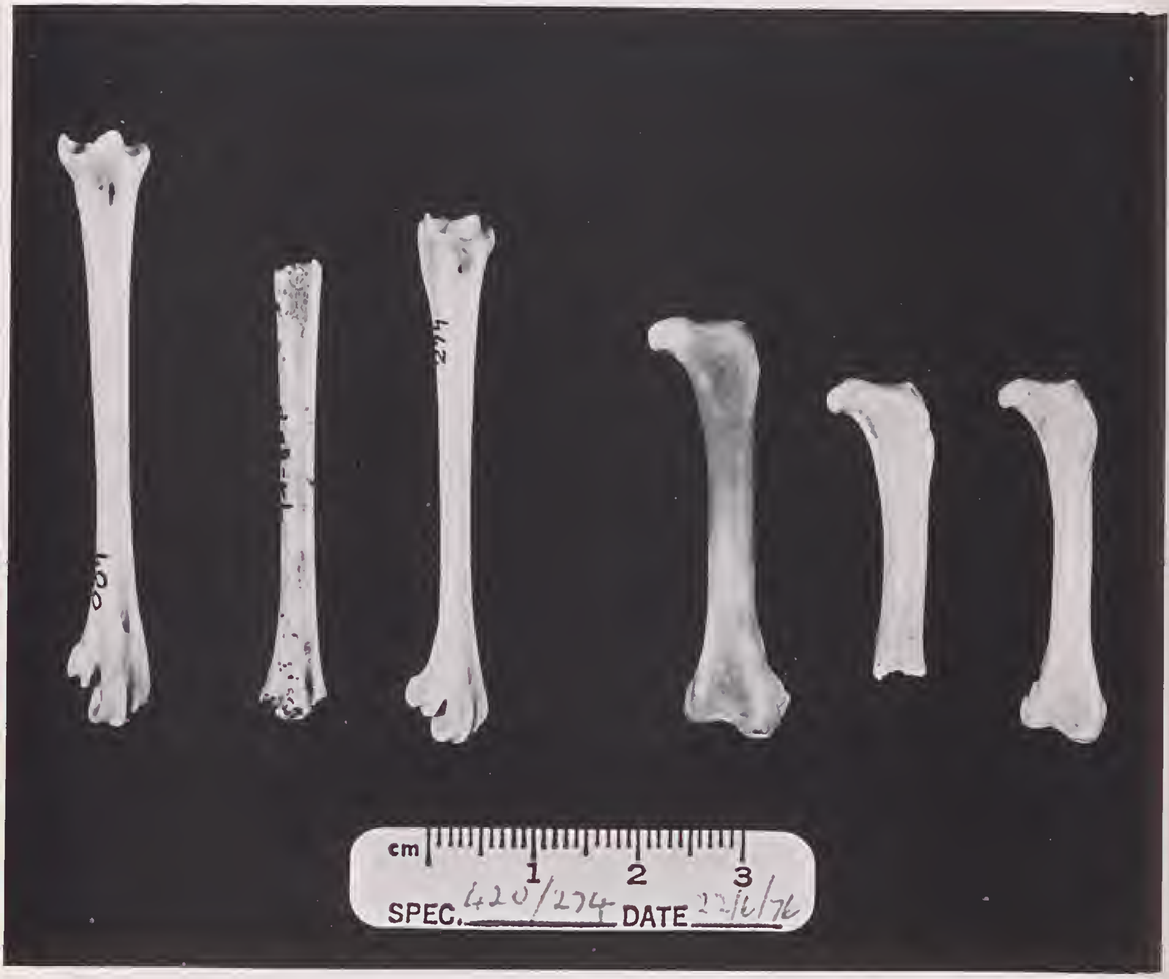

FIGURE 1 Left tarsometatarsus and femur of *Puffinus griseus* CS.BS.1648/PROS.627 from Beginners Luck Cave (JF-79-80), flanked by modern material of left *P. griseus* CS.BS.466/PROS.420 and right *P. tenuirostris* CS.BS.613/PROS.274.

Photograph by E. Slater.

Table 1

Material of *Tribonyx mortierii* found at Pleisto Scene Cave (MU-206) and Beginners Luck Cave (JF-79)

Location and specimen number	Bone	Side	Length mm.	Proximal width mm.	Narrowest width of shaft mm.	Distal width mm.
MU-206/A	cranium					
CS.BS 1649						
/GRUS 55	synsacrum					
	femur	right			6.5	18.1
	tibiotarsus	right		19.1	6.6	
	tarsometatarsus	right			5.4	12.4
	tarsometatarsus	left		14.5		
	tarsometatarsus	right				
MU-206/B3	humerus	right			4.2	
CS.BS 1650						
/GRUS 56	carpometacarpus	right		10.8	3.7	
	tibiotarsus	right	130	16.9	6.6	
	tibiotarsus	right			6.5	
	tibiotarsus	left			5.9	
	tibiotarsus	left				
	tarsometatarsus	right			5.7	
JF-79-80/P	humerus	left	61.2	13.5	4.2	10.0
CS.BS 1651	tibiotarsus	right	121.2	17.5	6.1	11.8
/GRUS 57	tarsometatarsus	left	78.8	13.0	5.2	12.2

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